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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,527	10/12/2001	David S. Allison	0007056-0200/P5943	3981
32615	7590	01/13/2005	EXAMINER	
OSHA & MAY L.L.P./SUN 1221 MCKINNEY, SUITE 2800 HOUSTON, TX 77010			DICKESON, MATTHEW A	
			ART UNIT	PAPER NUMBER

2122

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/977,527

Applicant(s)

ALLISON, DAVID S.

Examiner

Matthew A. Dickeson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 12 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Claims 1-12 were presented for examination. The priority date established for examination of this application is 10/12/2001. Claims 1-12 remain pending in this application and were considered by the examiner.

#### ***Specification***

2. The disclosure is objected to because of the following informalities: Semicolons have been used throughout the specification, but some semicolons appear to have been placed improperly in several areas (e.g., Pg. 11, l. 9). Applicant is requested to review and correct all errors in the specification.

3. The use of the trademarks "palm pilot" (Pg. 20, l. 15) and "Java" (Pg. 20, l. 17) have been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

To expedite correction on this matter, the examiner suggests the following guidelines for applicant to follow in amending the specification:

- i. Capitalize each letter of a trademark or accompany the trademark with an appropriate designation symbol, e.g., <sup>TM</sup> or ®, as appropriate.
- ii. Use each trademark as an adjective modifying a descriptive noun. For example, it would be appropriate to recite "PALM PILOT operating system" or "the PALM PILOT platform". Note that in this example, "operating system" and

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"platform" provide accompanying generic terminology, describing the context in which the trademark is used. By itself, the trademark PALM PILOT specifies only the source of the so-labeled products, namely palmOne, Inc.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 recites a method for statement boundary detection, comprising various operations to be performed on an input stream of characters to determine the boundaries, if any, of the statements within that input stream. Claim 5 recites a group of software modules for statement boundary detection, incorporating the same limitations as recited in claim 1. The method and software modules merely claim software and software components and thus (1) are not in the technological arts (manual/paper format implemented with the aid of the human mind); (2) the claims themselves cannot exhibit any functional interrelationship with the way (configured therein) in which computing processes are performed, and as such are non-functional descriptive materials and do not constitute a statutory process, machine, manufacture or composition of matter; and (3) the claims themselves are not drawn to any and every product of manufacture, e.g. computer, computer readable memory/medium product tangibly embodying instructions therein (to carry out/provide means, or impart functionality when encoded on a computer-readable medium), or computer-

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implemented method with a required Pre/Post-Computer Processing Activity, within a Safe Harbor. Lacking of such steps or acts, the claims, solely manipulations of an abstract idea which constitutes descriptive material per se, are not statutory because they are neither physical "things" nor statutory processes.

Claim 9 recites a computer program product, embodied on a computer usable medium, incorporating the same limitations as recited in claims 1 and 5. However, where applicant states that "computer code may be embodied in any form of computer program product", applicant defines a computer program product as comprising "CD-ROM disks; ROM cards, floppy disks, magnetic tapes, computer hard drives, servers on a network, and carrier waves." (See Pg. 22, l. 6-11) Applicant's defines exemplary forms of carrier waves comprising "electrical, electromagnetic or optical signals which carry digital data streams. The signals through the various networks and the signals on [a] network link and through [a] communication interface, which [carries] the digital data to and from [a] computer" (see Pg. 19, l. 16-20). Carrier waves, as defined by applicant, are merely electrical, electromagnetic or optical signals, which are transient in nature and thus are neither concrete nor tangible, nor are they a permanent medium upon which to embody the claimed invention. As such, since the claims must be given their broadest reasonable interpretation, the invention as claimed reads on both statutory and non-statutory subject matter. Claims that are broad enough to read on both statutory and non-statutory subject matter are considered non-statutory.

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Claims 2-4, 6-8, and 10-12 merely recite further non-functional descriptive limitations on their respective independent claims, and are not specifically drawn to statutory subject matter. As such, these claims are also rejected under 35 U.S.C. 101.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Williams (5,963,742).

Referring to claim 1, Williams ('742) discloses a method for processing complex input data using speculative parsing. An example of a complex input statement to be parsed is given (see Col. 2, l. 18-28, Figs. 1-9 and related text). The method of Williams ('742) comprises:

*"obtaining an input stream"* (See Fig. 1 and related text, e.g. Col. 1, l. 36-38, which refers to the parsing of a computer program input stream, and Col. 3, l. 26-29, which describes a lexical analyzer that "receives program source code".)

*"parsing said input stream to determine a natural end of a first statement, using a programming language syntax"* (See Figs. 1, 2, and 5 and related text, e.g. Col. 3, l. 35-47, which discuss a main parser unit that "determines when it has received all of the tokens (*input stream*) which comprise a single statement. ... For example, if PASCAL or C programming language source code (*programming language syntax*) is being

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compiled, main parser unit may recognize that it has received a complete statement ... when main parser unit detects the token corresponding to ... the end of a statement (a natural end of a first statement).” The reference cites two exemplary endings to programming statements, a semicolon and a carriage return; these endings, in the context of a programming language, are natural endings to the programming statement(s) they follow, just as punctuation marks are natural endings of statements in written human languages.)

*“dividing said input stream into a series of statements wherein said natural end is used to divide said first statement from a second statement”* (See Figs. 4, 5, 8a-d and related text, e.g. Col. 9, l. 28-31, where processing an input stream includes a step in which “a plurality of entry points are defined. Each entry point represents a complete statement”. The reference defines entry points as transitional points in execution, usable to invoke a subparser, to indicate the start and the end of a statement, and to indicate tokens within a statement (e.g., see Col. 7, l. 62-66, and Col. 8, l. 1-8). Figure 8a clearly shows a plurality of statements (*a series of statements*), each having an entry point defined (*said natural end*) which represents the division between those statements.) Thus, the teachings of the reference can be reasonably read to anticipate every limitation of applicant's claim 1.

As to claim 2, Williams ('742) teaches the use of a lexical analyzer to “read the source statements and [separate] each word, symbol, or number from the source statement into a ‘token’. Each token ... is passed to the parser” (*retrieving a next character from said input stream*). (E.g., see Col. 1, l. 25-30) The parser then

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determines when it has received a complete statement by detecting the token that represents the end of the statement. For example, "the end of a complete statement may be indicated by the start of a new line" (see Col. 3, l. 45-47), or by a carriage return or EOLN character. These characters, converted to tokens by the lexical analyzer, cause the main parser to pass the statement up to and including the characters to the subparsers without appending any further tokens to the statement (*positioning said natural end ... immediately before said next character, if appending ... is inconsistent with said programming language syntax*). The main parser passes only complete statements, i.e. statements that conclude with the token recognized as the separator between two statements in a given programming language, since appending the character following this token would produce a statement inconsistent with the syntax of the programming language. Thus, the teachings of the reference can be reasonably read to teach the limitations of applicant's claim 2.

In regard to claim 3, Williams ('742) discusses the role of the lexical analyzer in parsing an input stream, recognizing identifiers, constants, and other values from the input stream and converting them to tokens. The parser then "imposes a structure on the sequence of tokens (*one or more characters previously retrieved from said input stream*) using a set of rules appropriate for the language." (E.g., see Col. 1, l. 36-45) Imposing a set of grammar rules appropriate to the language (*programming language syntax*) upon the sequence of tokens is performed to determine whether that sequence of tokens is constructed according to one or more grammar rules, i.e. whether the



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statement comprised by the sequence of tokens fits the context of a statement consistent with that language (*determining a context*).

The reference also teaches that the parser may recognize that it has received a complete statement when it detects the token indicating the end of a statement. (E.g., see Col. 3, l. 35-47) A properly constructed statement consistent with a programming language syntax can be followed by a statement termination token, such as a semicolon or a carriage return. Such a token could follow any statement constructed in the context of a programming language. When one such token of the sequence of tokens represents a statement termination token (*said natural end*), and is positioned at the end of a sequence of tokens representing a statement written in the context of a programming language (*positioning ... based on said context*), it can conform to the syntax of that programming language (*and said programming language syntax*). These teachings can be reasonably read to anticipate the limitations of applicant's claim 3.

With respect to claim 4, Williams ('742) describes a situation in which the parser detects the token corresponding to the end of a statement (*statement termination token*) as applied above to claim 1. This clearly anticipates the limitation of applicant's claim 4.

Claims 5 and 9 are directed to software modules and a computer program product, respectively, and recite the same limitations as those of the method of claim 1. Although claims 5 and 9 are directed to a different class of statutory subject matter than claim 1, they do not recite any limitations different than those of claim 1. Therefore, as the reference teaches all of the limitations of claim 1 as shown above, it also teaches all of the limitations of applicant's claims 5 and 9.

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Similarly, claims 6-8 and 10-12 are directed to a different class of statutory subject matter (e.g., a product rather than a method), but recite the same limitations as claims 2-4, respectively. Since the reference teaches all of the limitations of claims 2-4 as shown above, it also teaches all of the limitations of applicant's claims 6-8 and 10-12.


### **Conclusion**

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yu (2002/0144246), Pratt (6,134,709), and the works of Aho et al. further describe the state of this art.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew A. Dickeson whose telephone number is (571) 272-7219. The examiner can normally be reached on Monday thru Friday, 8:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
TUAN DAM  
SUPERVISORY PATENT EXAMINER